

REMARKS

Introduction

Applicants acknowledge receipt of the Office Action dated December 23, 2008. Claims 1-6 and 8-12 are pending. Claim 7 is cancelled.

With the present Reply and Amendment, Applicants amend claim 11 for purposes of clarity with respect to the term "weed" and antecedent basis for the term "locus." Applicants also introduce new claims 13 and 14. Basis for new claims 13 and 14 is found throughout the specification including, but limited to, page 10, lines 4-10 and page 10, lines 12-13, respectively. A Request for Continued Examination (RCE) and the requisite fee are submitted contemporaneously herewith. Reconsideration of the pending claims is respectfully requested.

Rejection Under 35 U.S.C. §103

A. Rejection of Claims 1-6, 8, 11, and 12 over Pallett et al. (WO 02/21919) in view of Johnson (US 4,776,882)

The Examiner rejects claims 1-6, 8, 11, and 12 under 35 U.S.C. §103(b) as being unpatentable over Pallett et al. (WO 02/21919) in view of Johnson (US 4,776,882). The Examiner contends Pallett et al. teach a herbicidal composition comprising 2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione and ethoxylated tristeryl-phenol phosphate as adjuvant as well as a method of applying the composition for controlling the growth of weeds in crops-growing areas. The Examiner admits that Pallett et al. do not teach the claimed phosphate adjuvant but claims that Johnson cures this deficiency by disclosing a composition comprising a penetrant-carrier in combination with a biocide. Thus, the Examiner concludes that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Pallett et al. and Johnson to arrive at the instant invention. The basis for this conclusion is that one of ordinary skill would have been motivated to try other phosphate adjuvant to improve herbicidal effect and would have had a reasonable expectation of success in producing the claimed invention. Applicants respectfully disagree.

Pallett et al. relates to herbicidal compositions comprising a mixture of a bezoyl cyclohexanedione and herbicidal urea compounds as well as a method of controlling weeds (see page 1, lines 3-4). Contrary to the Examiner's assertion, Pallett et al. does not disclose a herbicidal composition comprising a metal chelate of a 2-(substituted benzoyl)-1,3-cyclohexanedione of formula (I) and an organic phosphate, phosphonate or phosphinate

adjuvant as recited in the instant claim 1, much less a metal chelate of a 2-(substituted benzoyl)-1,3-cyclohexanedione in combination with the instantly claimed phosphate adjuvant.

Instead, Pallett et al. simply state:

Herbicidal compositions according to the present invention may also contain, if desired, conventional adjuvants such as adhesives, protective colloids, thickeners, penetrating agents, stabilisers, sequestering agents, anti-caking agents, colouring agents and corrosion inhibitors. These adjuvants may also serve as carriers or diluents.

See page 7, lines 9-13.

Contrary to the Examiner's assertion, Pallet et al.'s Example C1 does not contain any ingredients that can be specifically described as phosphate adjuvants. While Pallet et al. disclose, *inter alia*, a composition comprising ethoxylated tristyryl phenol phosphate (Soprophor FL) (See Example C1), the ethoxylated tristyryl phenol phosphate utilized in Example C1 is physically different from the phosphate and phosphinate /phosphonates adjuvants of the present invention. Specifically, the ethoxylated tristyryl phenol phosphate of Example C1 represents a surface active agent which acts as a dispersing/suspending agent for the solid particles comprised in the suspension concentrate formulation. The inclusion of a dispersing agent for suspension concentrate formulations is standard practice in the crop science industry because phosphated dispersants such as ethoxylated tristyryl phenol phosphate merely convey some degree of charge stabilization to the suspension concentrate. One of ordinary skill in the art, however, would have no reason to believe that ethoxylated tristyryl phenol phosphate would provide comparable adjuvant or bioactivation properties as demonstrated by the phosphate and phosphinate /phosphonates adjuvants of the present invention.

Johnson does not cure the deficiencies of Pallet et al. Johnson relates to a concentrated basal spray and, in particular, the use of phosphoric acid and/or phthalic acid esters as wood penetrants for biocidally active ingredient in basal spray compositions (see Abstract). Basal spray is defined as a composition "which is directly applied, usually via conventional low volume spray apparatus, to the stem or bark of a woody plant, usually at the basal portion of the plant" (see column 2, line 6).

The present invention provides a formulation which improves the selectivity of the 2-(substituted benzoyl)-1,3-cyclohexanedione herbicides of formula (I) by including in the phosphate, phosphonate or phosphinate adjuvants as recited in claim 1. These phosphate, phosphonate or phosphinate adjuvants have been shown to improve the level of activity of the 2-(substituted benzoyl)-1,3-cyclohexanedione with little or no increase in crop damage (i.e. the

selectivity of the -(substituted benzoyl)-1,3-cyclohexanedione is increased). Johnson patent does not relate to or even suggest improved selectivity of herbicidal compounds. Instead, Johnson simply relates to adjuvants which provide improved wood penetration of biocidal compounds (e.g., herbicides).

The Examiner incorrectly suggests that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Pallet and Johnson to arrive at the instant invention. In fact, one of ordinary skill in the art could not have replaced the phosphate dispersing agent in the composition taught by Pallet with a wood penetration phosphate adjuvant taught by Johnson to arrive at the instant invention. At best, one of ordinary skill in the art that was considering alternative dispersing agents to ethoxylated tristyril phenol phosphate taught by Pallet et al. would have examined phosphates having similar dispersing properties. There was absolutely no motivation for one of ordinary skill to consider phosphate compounds not having dispersing properties but rather exhibiting adjuvant (wood penetration) properties as those instantly claimed phosphate compounds. Thus, one of ordinary skill would not have been motivated to employ the instant phosphate adjuvant to improve herbicidal effect and would not have had a reasonable expectation of success in producing the claimed invention. Accordingly, the instantly claimed herbicide is not disclosed or even remotely suggested by Pallett et al. Reconsideration and withdrawal of this rejection is respectfully requested.

B. Rejection of Claims 9-10 over Pallett et al. (WO 02/21919) in view of Goyette (U.S. Patent No. 2,927,014)

The Examiner rejects claims 9-10 under 35 U.S.C. §103(b) as being unpatentable over Pallett et al. (WO 02/21919) in view of Goyette (U.S. Patent No. 2,927,014). The Examiner once again asserts, as a basis for the rejection, that Pallett et al. teach a herbicidal composition comprising 2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione and a phosphate as adjuvant. Again, in determining the scope and content of the prior art, the Examiner has erred in suggesting that Pallet teaches a herbicidal composition comprising mesotrione or its metal complex and a phosphate as adjuvant. Applicants reiterate that Pallet et al. disclose no such teaching and, thus, the obviousness analysis provided in the Office Action is without proper basis. Reconsideration and withdrawal of this rejection is respectfully requested.

C. Rejection of Claims 1-6 and 9-11 over Scher et al. (U.S. Patent No. 5,912,207) in view of Goyette (U.S. Patent No. 2,927,014)

The Examiner rejects claims 9-10 under 35 U.S.C. §103(b) as being unpatentable over Scher et al. (U.S. Patent No. 5,912,207) in view of Goyette (U.S. Patent No. 2,927,014). The Examiner argues that Scher et al. teach a herbicidal formulation comprising a metal chelate herbicide and a phosphate as an adjuvant that provides the source of the metal ion. The Examiner admits that Scher et al. do not disclose phosphonate or phosphinate adjuvants but contends that Goyette teach phosphonate and phosphinate possess herbicidal activity. Based on these alleged teachings, the Examiner concludes that one of ordinary skill would have been motivated to substitute the alleged adjuvant with a phosphonate or a phosphinate and expect similar and successful results because the phosphonate and phosphinate both possess herbicidal activity that, when used in combination with a herbicide, can further enhance the herbicidal effect of the cyclohexanedione compound for controlling the growth of unwanted vegetations. Applicants respectfully disagree with the basis of this contention.

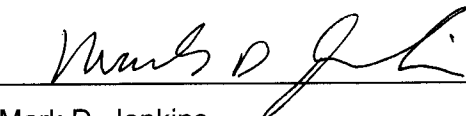
The rejection is based on the contention that Scher et al. teach an herbicidal composition comprising a metal chelate herbicide and a phosphate as an adjuvant. Scher et al. do not teach such a combination. Instead, Scher et al. merely suggest that a phosphate is an example of a suitable salt which could be the source of the di- or tri-valent metal ion (see column 7, line 57). Thus, Scher et al. do not teach or suggest the use of a phosphate adjuvant as instantly claimed. Accordingly, Applicant considers that the obviousness analysis provided in the Office Action, which is predicated on the assumption that Scher et al. teach a phosphate adjuvant is without proper basis. Reconsideration and withdrawal of this rejection is respectfully requested.

CONCLUSION

Applicant believes the claims are in condition for allowance. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated, since this should expedite the prosecution of the application for all concerned.

Respectfully submitted,

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